Task 2 : XX medical analysis laboratory:

→ Branch : Branch Code, shop name, City, Area, street, Building_no, floor_no, manager_ID

→ medical test → Test Code, Test Name, Cost, Duration, Related Conditions.

→ Patient → Patient ID, full name, Age, mobile number, Date of Birth, Gender, Chronic Diseases.

→ Employee → Employee ID, full name, Salary, Team, start time, end time, Branch Code, supervisor ID

Relationship Entity → Branch Test → Branch Code, Test Code

→ Patient visit → Visit Id, patient Id, Branch Code, Test Code, Visit Date, visit time.

Relationship Entity

* Relationship analysis:-

1- Branch ↔ medical test (M:M through Branch test)
→ one Branch Provides many tests.
→ one test can be Provided by many branches
→ Relationship: "provides".

2- Branch ↔ Employee (1:m)
→ one Branch has many employees.
→ one Employee works in exactly one Branch.
→ Relationship: "works-in"

3- Employee ↔ Employees (1:m → self referancing)
→ one Employee can supervise many employees.
→ one Employee has at most one supervisor.
→ Relationship: "Supervises".

4- Branch ↔ Employee (1:1 for manager)
→ one Branch has exactly one manager.
→ one Employee can manage at most one Branch.
→ Relationship: "manages".

08 5- Patient ⟷ Branch ⟷ medical test (M:M:M through patient test)

09 → one Patient can visit many branches for many tests.

10 → one branch can serve many patients for many tests.

11 → one test can be performed for many patients at many branches.

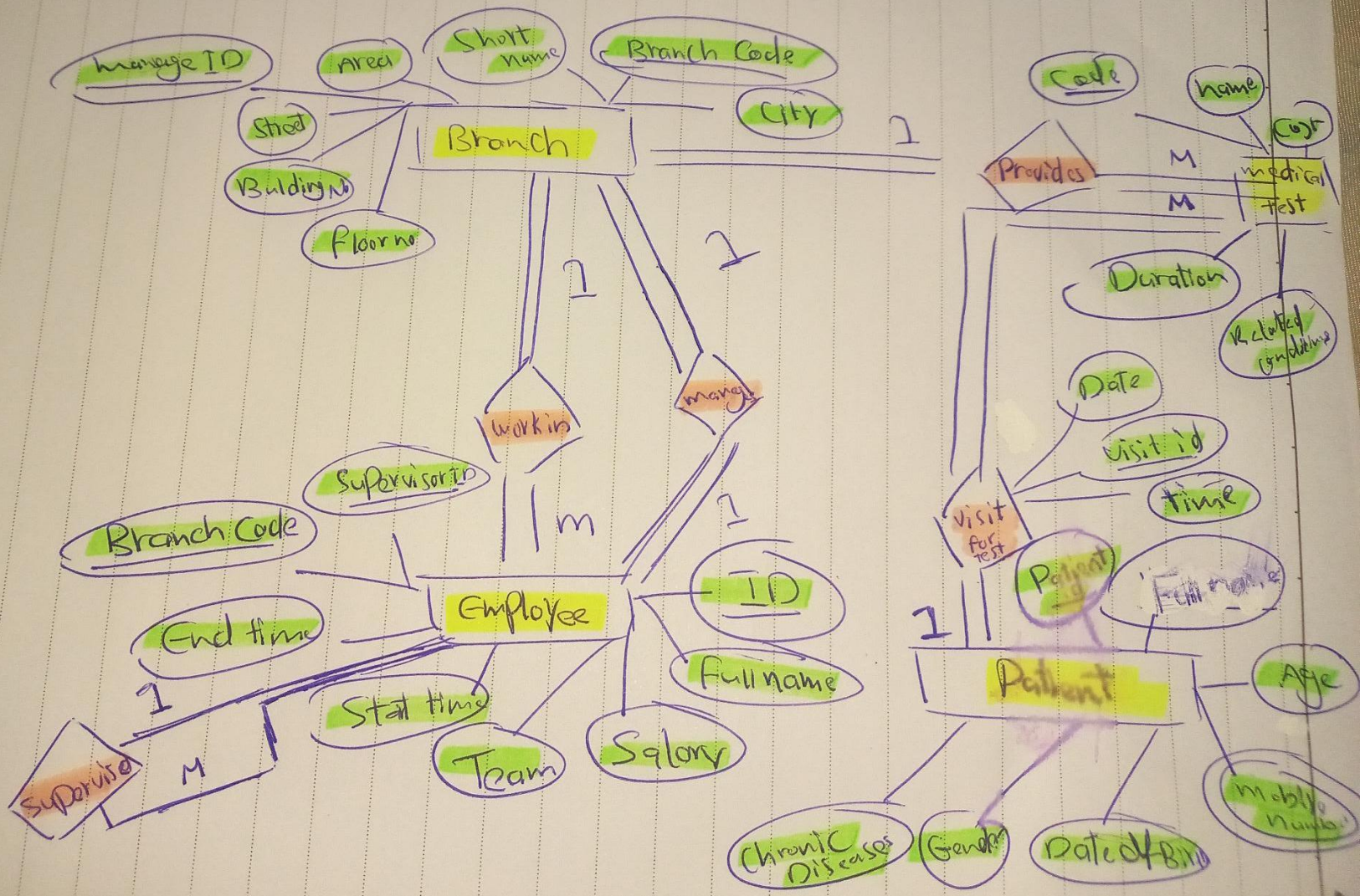
12 → Relationship: "visits_for_Test"

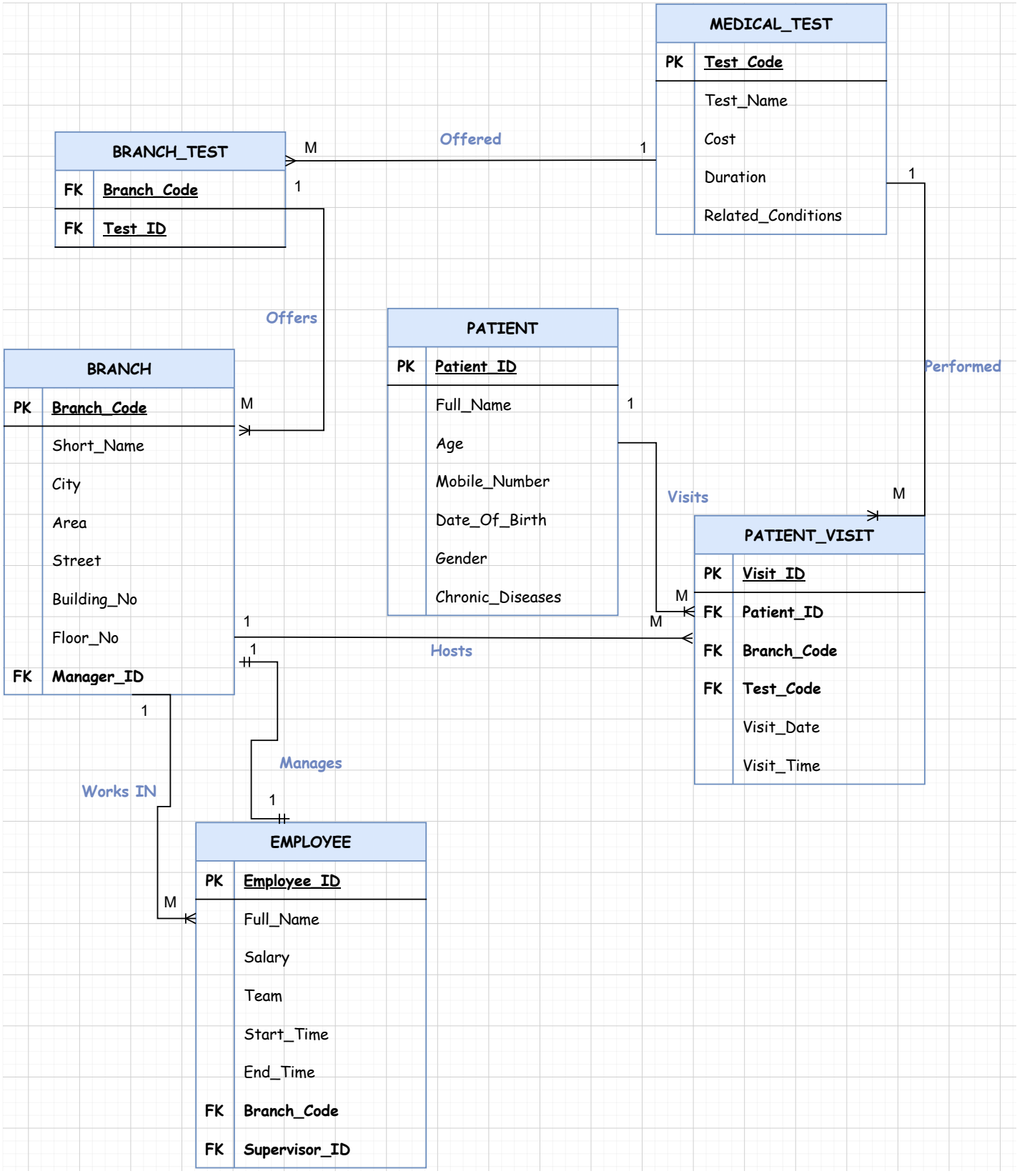
01

02

03

4


Manage ID
Area
Short name
Branch Code
City
Street
Branch
Building No
Floor no
1
1
1
Code
name
Cost
Provides
M
M
Medical test
Duration
Related conditions
Date
visit id
Time
Visit for test
Patient id
Full name
1
Patient
Age
mobile numb
Chronic Diseases
Gender
Date of Birth
Working
Manage
Supervisor ID
Branch Code
M
1
End time
Employee
ID
Full name
Start time
Team
Salary
1
M
Supervise


MEDICAL_TEST
PK Test_Code
Test_Name
Cost
Duration
Related_Conditions
BRANCH_TEST
FK Branch_Code
FK Test_ID
M
1
Offered
1
1
Performed
Offers
M
PATIENT
PK Patient_ID
Full_Name
Age
Mobile_Number
Date_Of_Birth
Gender
Chronic_Diseases
1
BRANCH
PK Branch_Code
Short_Name
City
Area
Street
Building_No
Floor_No
FK Manager_ID
Visits
M
PATIENT_VISIT
PK Visit_ID
FK Patient_ID
FK Branch_Code
FK Test_Code
Visit_Date
Visit_Time
M
M
1
1
Hosts
1
Manages
1
Works IN
M
EMPLOYEE
PK Employee_ID
Full_Name
Salary
Team
Start_Time
End_Time
FK Branch_Code
FK Supervisor_ID